

FIGURE 1A

NUCLEOTIDE SEQUENCE OF NS2/3 (810-1206) ST (SEQ ID. No. 1)

atggaccggg agatggctgc atcgtgcgga ggcgcgggtt tcataggtct tgcactcttg
accttgtcac catactataa agtgcctctc gctaggetca tatggtgggt acagtattta
atcaccagag tcgaggcgca cttgcaagtg tggatcccc ctctcaatgt tcggggaggg
cgcatgccca tcactctctc cactgogca gtccaccag agctaattct tgacatcacc
aaactcctgctcgccatattcggtccgctcatgggtgctccaggcaggcataaccaaagtgccgtac
ttcgtgctg cgcaggggct cattcgtgcg tgtatgttg tgcggaaggc tgcggggggg
cattatgtcc aaatggcctt catgaagcta gctgcgctga caggtagcta cgtttatgac
catctcactc cattgcagga ttggggccac gcgggcctac gagaccttgc agtggcggtta
gagcccgta tcttctctga catggaggtc aagatcatca cctggggggg ggacaccgcg
gcatgcgggg acatcatttc aggtctgccc gtctccgctc gaaggggaag ggagatactc
ctgggaccgg ccgataattt tgaaggcgag ggggtggcgac tccttgcgcc catcacggcc
tactcccaac agacacgggg cctacttggg tgcacatca ccagcctcac aggcggggac
aagaaccagg tcgaggggga ggttcaagtg gtctccaccg ctacacaatc tttcctggcg
acctgcgtca acggcggtg ttggactgtc ttccatggcg ccgggtcaaa gaccttggcc
ggcccaaaag gcccaatcac ccagatgtac actaatgtgg accaggacct cgtcggctgg
caggcgcccc ctggggcgcg ctccatgaca ccatgcacct gcggcagctc ggacctctat
ttgggtcacga gacatgccga cgtcattccg gtgcgcccgc ggggcgacag taggggggagc
ctgctctccc ccaggcctgt ctccacttg aagggtctct cgggtggccc actgctctgc
ccttcggggc acgttgtggg catcttccgg gctgctgtgt gcaccggggg ggttgcaaaa
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cgtaaccgc agttcgggtg t

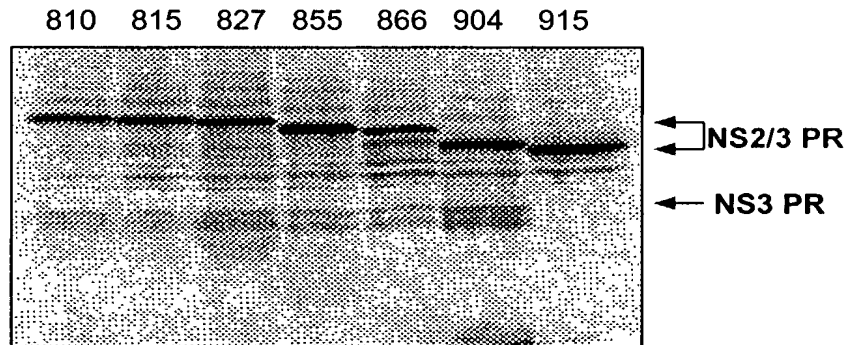
FIGURE 1B

AMINO ACID SEQUENCE OF NS2/3 (810-1206)-ST (SEQ ID NO. 2)

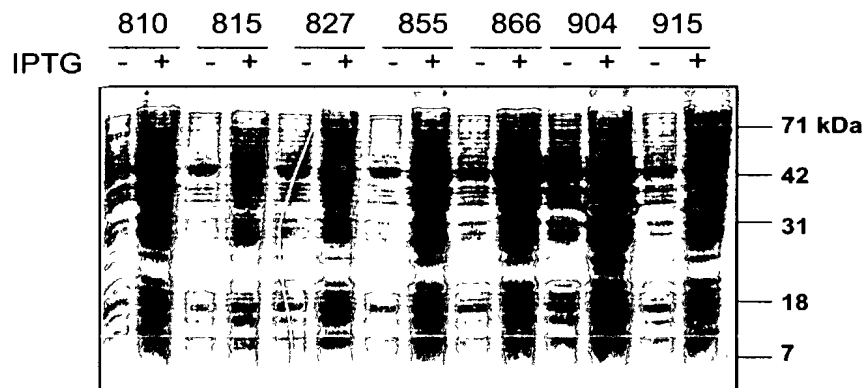
MDREMAASCG GAVFIGLALL TLSPYYKVL ARLIWWLQYL ITRVEAHLQV WIPPLNVRGG RDAIILLTCA
VHPELIFDIT KLLLAIFGPL MVLQAGITKV PYFVRAQGLI RACMLVRKAA GGHYVQMAFM KLAALTGTYY
YDHLTPLQDW AHAGLRDLAV AVEPVIFSDM EVKIITWGAD TAACGDIISG LPVSARRGRE ILLGPADNFE
GQGWRLAPI TAYSQQTRGL LGCIITSLTG RDKNQVEGEV QVVSTATQSF LATCVNGVCW TVFHGAGSKT
LAGPKGPITQ MYTNVDQDLV GWQAPPGARS MTPCTCGSSD LYLVRHADV IPVRRRGDSR GSLLSPRPVS
YLKSSGGGPL LCPSGHAVGI FRAAVCTRGV AKAVDFIPVE SMETTMRTSS AWRHPQFGG

FIGURE 2

A. *in vitro* translated N-terminal deletion mutants



B. *E. coli* expression - SDS-PAGE



C. *E. coli* expression - Immunoblot with anti-NS3

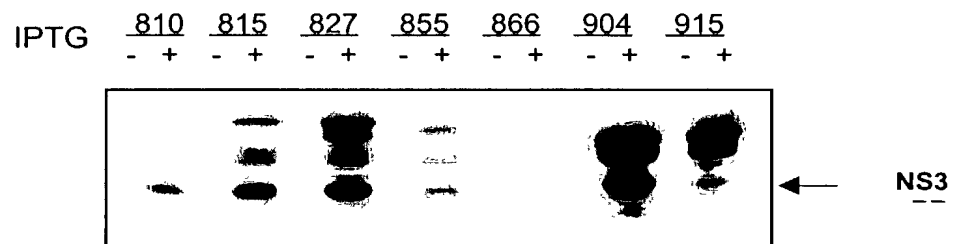




FIGURE 5

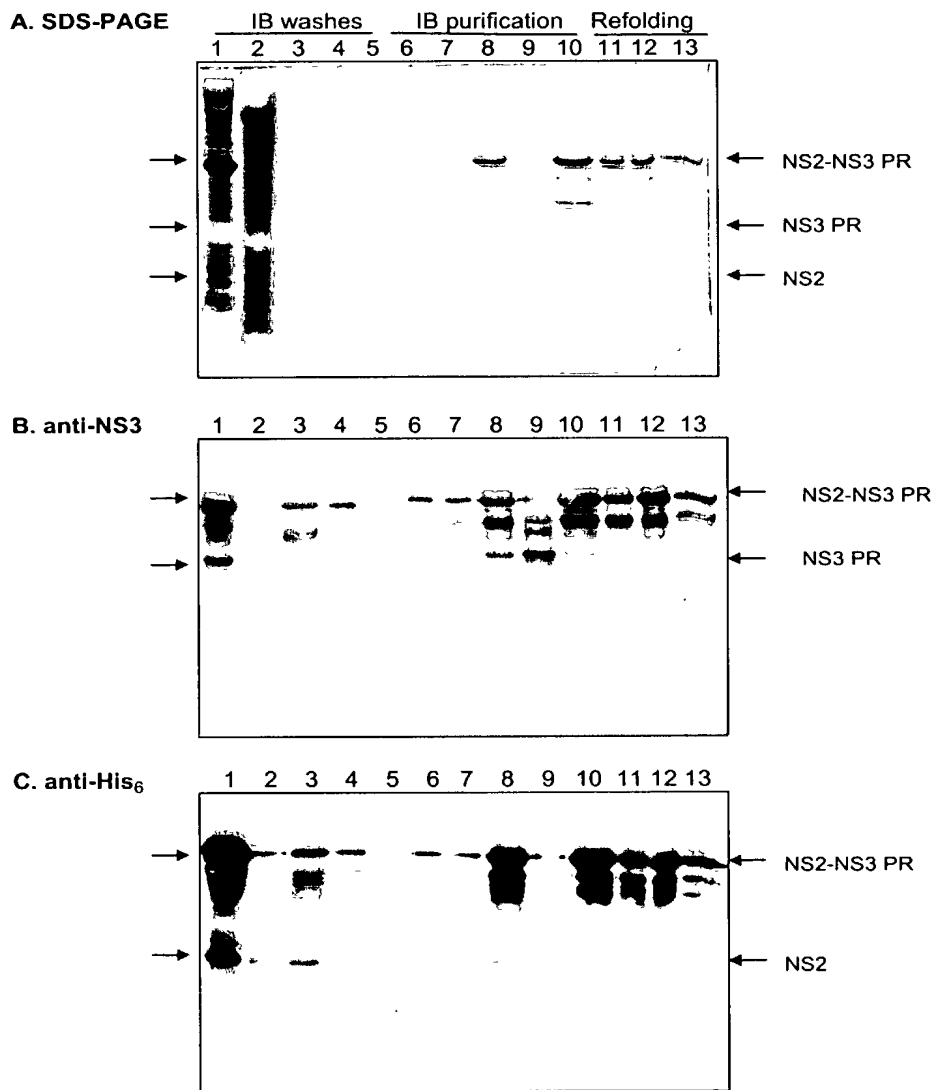


FIGURE 6

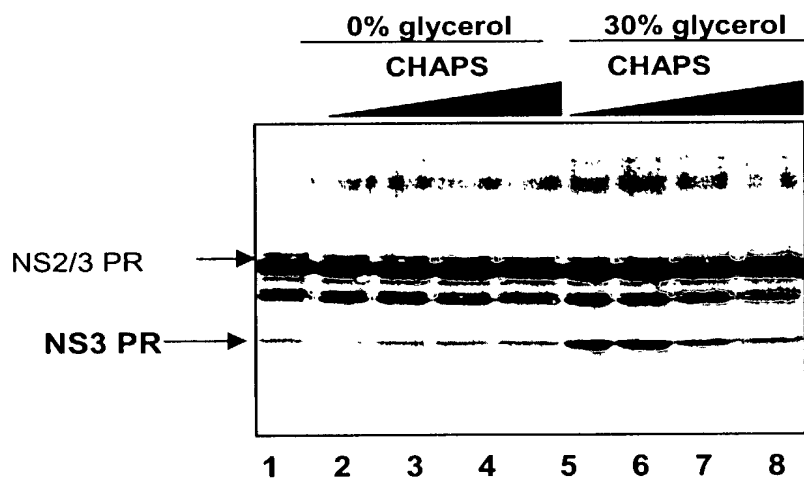


FIGURE 7

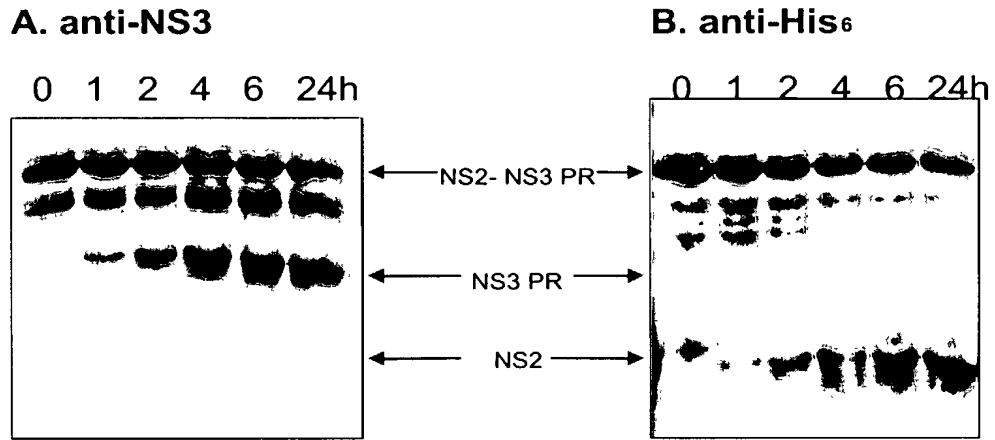
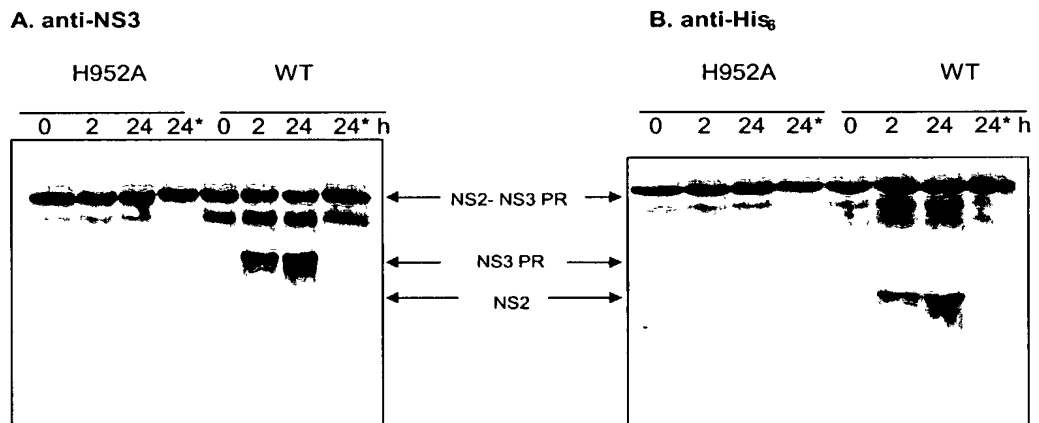


FIGURE 8



$$\frac{d^2}{dt^2} \left(\frac{1}{r} \right) = -\frac{1}{r^3} \left(\frac{dr}{dt} \right)^2 + \frac{1}{r^3} \left(r \frac{d^2 r}{dt^2} \right)$$

atgaaaaaaga	aaaagctcga	gcataccat	caccatcaca	ctagtgcagg	cataaccaaa
gtgccgtact	tcgtgcgtgc	gcaggggctc	attcgtgcgt	gtatgttggt	gcggaaggct
gcgggggggtc	attatgtcca	aatggccttc	atgaagctag	ctgcgctgac	aggtacgtac
gtttatgacc	atctcactcc	attgcaggat	tggggccacg	cgggcctacg	agaccttgca
gtggcggtag	agcccgcat	cttctctgac	atggaggtca	agatcatcac	ctggggggcg
gacaccgcgg	catgcgggga	catcatttca	ggtctgcccg	tctccgctcg	aaggggaagg
gagatactcc	tgggaccggc	cgataatttt	gaagggcagg	ggtggcgact	ccttgcgccc
atcacggcct	actcccaaca	gacacggggc	ctacttggtt	gcatcatcac	cagcctcaca
ggccgggaca	agaaccaggt	cgagggggag	gttcaagtgg	tctccaccgc	tacacaatct
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accttggccg	gccccaaagg	cccaatcacc	cagatgtaca	ctaattgtga	ccaggacctc
gtcggctggc	aggcgcccc	tggggcgcg	tccatgacac	catgcacctg	cggcagctcg
gacctctatt	tggtcacgag	acatgccgac	gtcattccgg	tgcgccggcg	gggcgacagt
agggggagcc	tgctctcccc	caggcctgtc	tctacttga	agggtctctc	gggtggccca
ctgctctgcc	cttcggggca	cgttgtgggc	atcttccggg	ctgctgtgtg	caccgggggg
gttgcaaaag	cggtggactt	catactgtt	gagtctatgg	aaactaccat	gcggactagt
agcgcttggc	gtcaccgcga	gttcggtggt	aaaaagaaaa	agtaaggatc	c

FIGURE 9B

AMINO ACID SEQUENCE OF 4K-6H-NS2/3 (904-1206) ST-4K

(SEQ ID NO. 4)

MKKKKLEHHH	HHHTSAGITK	VPYFVRAQGL	IRACMLVRKA	AGGHYVQMAF	MKLAALTGTY	60
VYDHLTPLQD	WAHAGLRDLA	VAVEPVIFSD	MEVKIITWGA	DTAACGDIIS	GLPVSARRGR	120
EILLGPADNF	EGQGWRLLAP	ITAYSQQTRG	LLGCIITSLT	GRDKNQVEGE	VQVVSTATQS	180
FLATCVNGVC	WTVFHGAGSK	TLAGPKGPIT	QMYTNVDQDL	VGWQAPPGAR	SMTPTCTGSS	240
DLYLVTRHAD	VIPVRRRGDS	RGSLLSPRPV	SYLKGSSGGP	LLCPSGHAVG	IFRAAVCTRG	300
VAKAVDFIPV	ESMETTMRTS	SAWRHPQFGG	KKKK			337

FIGURE 10

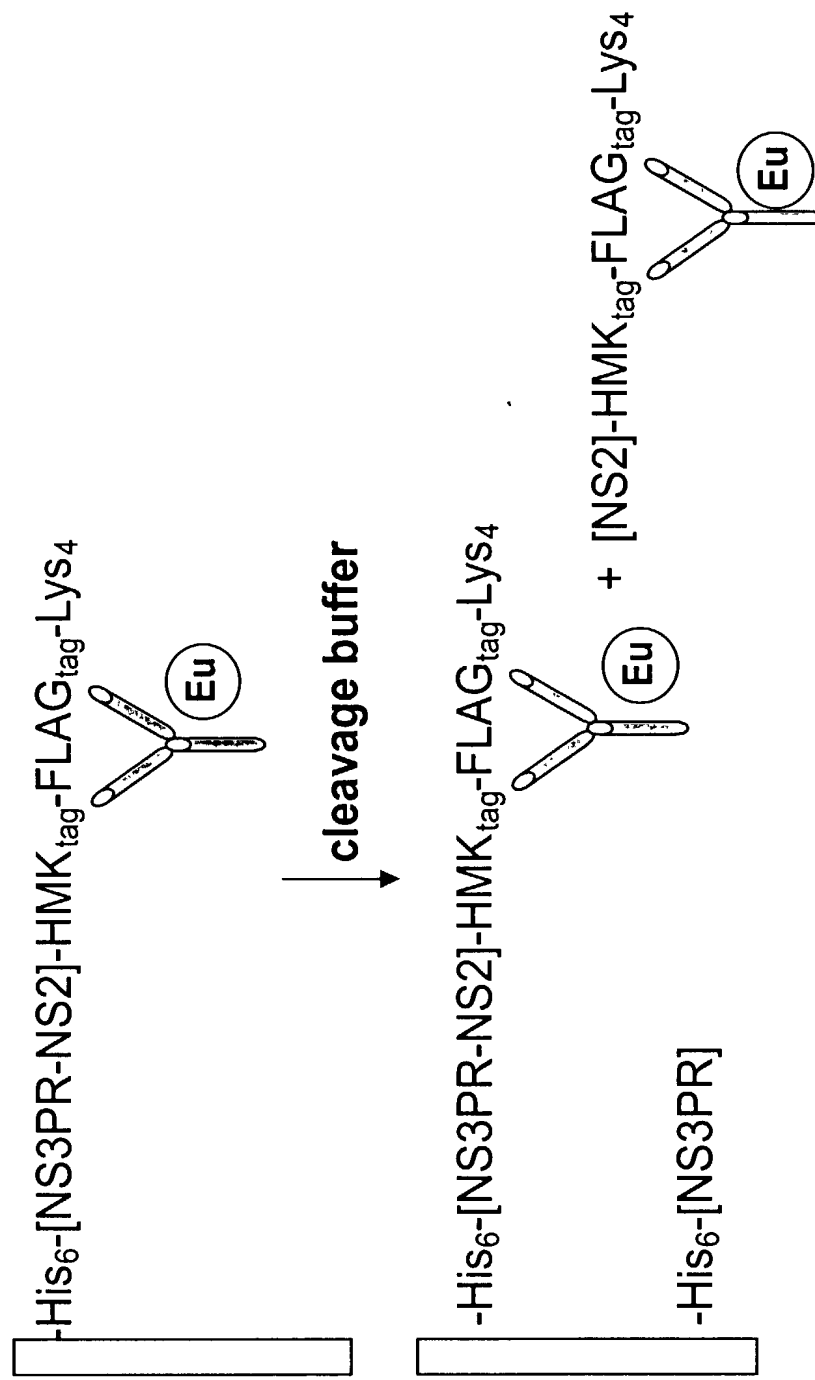


FIGURE 12

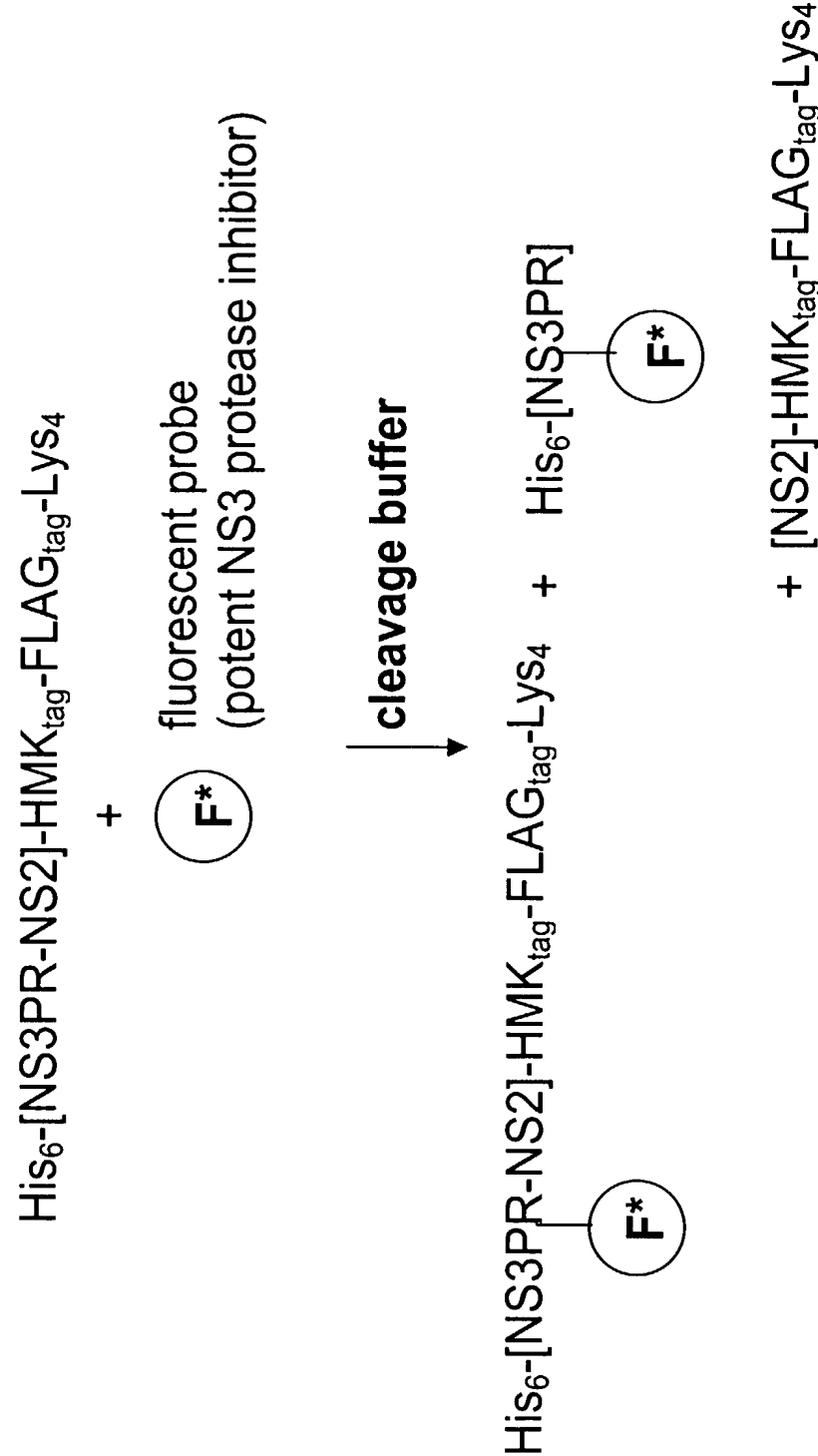


FIGURE 13

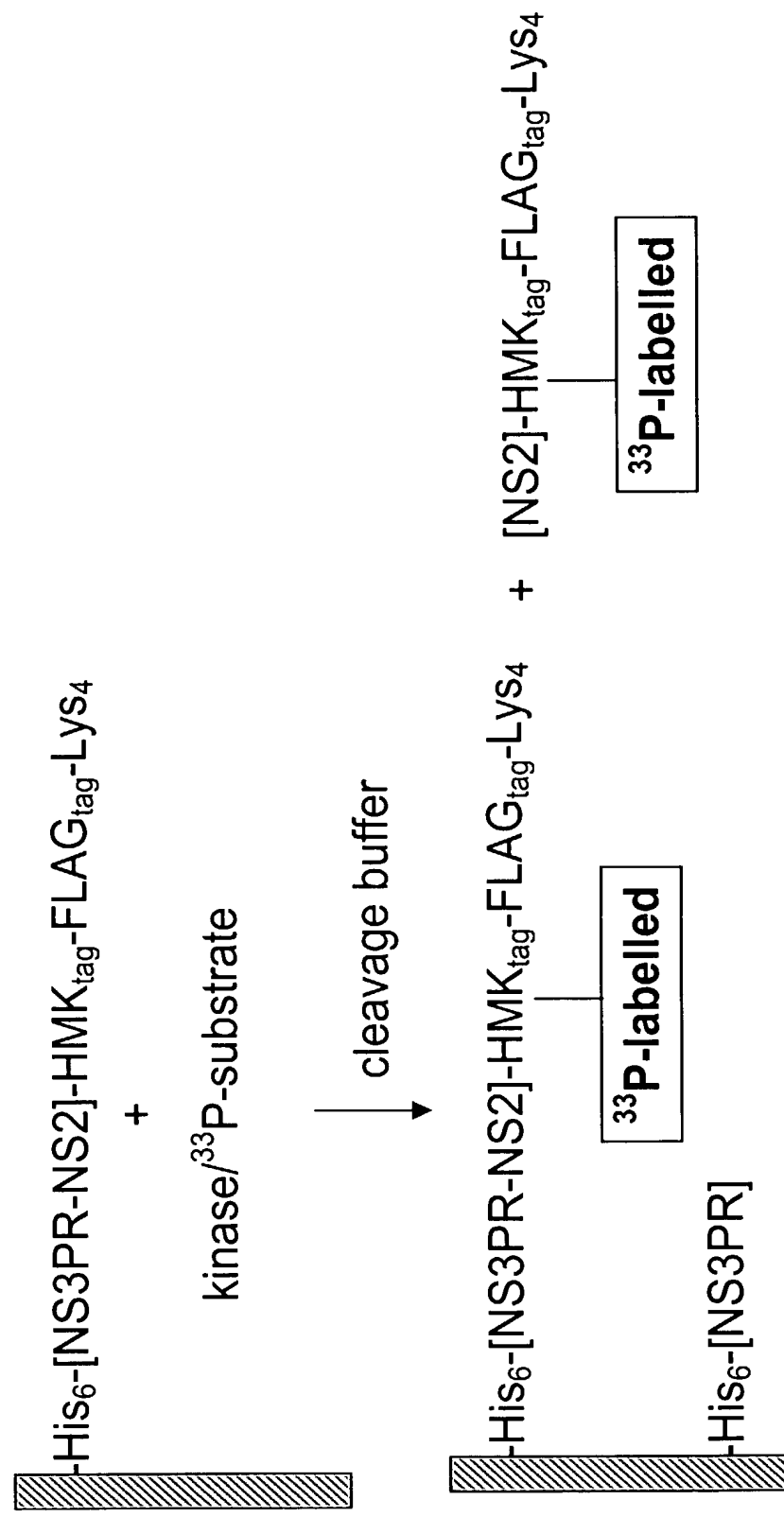


FIGURE 14

